

The Examiner has rejected Claims 1-6, 11-14, 16-23 and 25-27 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 5,956,121 to Hosoi et al. in view of U.S. Patent No. 5,993,001 to Bursell et al. The Examiner has rejected Claims 7-9 under 35 U.S.C. § 103 (a) as being unpatentable over Hosoi et al. in view of U.S. Patent No. 6,523,954 to Kennedy et al. Finally, the Examiner has rejected Claims 10, 15 and 24 under 35 U.S.C. § 103 (a) as being unpatentable over Hosoi et al. in view of U.S. Patent Application Publication No. 2001/0032100 A1 to Mahmud et al. Applicants respectfully traverse each of these rejections as they pertain to the present claims.

In order to sustain a rejection under 35 U.S.C. § 103 (a) each element of the claimed invention must be disclosed or described by the prior art and any differences may not be such that they would have been obvious to one of ordinary skill in the art at the time the invention was made. However, one cannot use the teachings or suggestions of the Applicant to establish obviousness. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983). Instead, the proper test is whether the combined teachings of the prior art references *suggest* the improvements embodied by the claimed invention. *In re GPAC*, 57 F.3d 1573, 1581 (Fed. Cir. 1995) (*emphasis added*). Applicants assert that the subject invention is not obvious in light of the prior art of record.

Applicants' invention is directed to a telemedicine system and method for conducting an eye examination on a patient, analyzing the results therefrom and transmitting the diagnosis and treatment to the patient. The system includes a plurality of remote examination centers each having a variety of optical testing and diagnostic devices which are designed and configured to conduct a variety of examination protocols of the patient's eye. Each of the remote centers further includes a controller for collecting the information from each or all of the optical devices and additionally conducts the examination of the patient's eye. The method further involves a diagnostic center where the information collected at the remote locations is collected, analyzed and evaluated, and the need for further testing is ascertained. The diagnostic centers is in two-way electronic communication via communications link with the remote exam centers. An exam console is also included at the diagnostic center where a diagnosis may be conducted based on the collected information and, based on this diagnosis, a report may be generated, additional examinations may be directed, and prescriptions may be dispensed. The diagnostic center may also include a central database for storage and maintenance of exam records.

The claimed invention provides critical, efficient and complete eye care to patients in a plurality of remote locations and may include a plurality of diagnostic tests to evaluate and diagnose not only the condition of the patient's eye, but the overall health of the patient. Interactive communication is permitted while the patient is undergoing a thorough examination using a variety of optometric diagnostic devices and allows the examination to be modified based on the real time results of the testing apparatus as such results are transmitted and analyzed by the practitioner. Those who would otherwise have to travel long distances for a complete eye examination may now be able to obtain such an exam in a convenient and inexpensive manner. Similarly, those medical professionals that may be in need of assistance from a specialist who is outside of their geographic area can utilize this system to obtain inexpensive and timely assistance.

In contrast, U.S. Patent No. 5,956,121 to Hosoi et al. is directed to a communications system for examining the eye to facilitate the prescription of corrective lenses. The system comprises a number of identical eye examination units 100, e.g. optician's shops, which are linked together through a public communication network 18. The system includes a subjective refractive power measuring device 2, a controller 3, a target presenting device 4, a relay unit 5, an objective refractive power measuring device 6, a lens meter 7, a microphone 8 and a speaker 9. The objects of the Hosoi et al. invention are to provide an accurate visual acuity test for the patient and to oversee in the training of an inexperienced examiner. Therefore, the system described therein is designed to provide real time direction and collection of *data* from a remote examiner to a local examiner. However, there is no disclosure or suggestion that the examiner at the remote location actually analyzes the data or provides a diagnosis of the health of the patient's eye based on the information sent from the remote location. Additionally, Hosoi et al. is limited to a visual acuity examination and does not disclose or suggest that the systems maybe appropriate for further and more complex testing, as detailed in Applicants' invention. To the contrary, since one of the objects of Hosoi et al. is to facilitate training of the inexperienced optician, it is not likely that one of skill in the art would view the Hosoi et al. patent as a system for use with more complex testing situations, such as those claimed by Applicants. Thus, Hosoi et al. can be said to teach away from Applicants claimed system.

U.S. Patent No. 5,993,001 to Bursell et al. is directed to an image acquisition unit to be used for retinal degeneration screening. The apparatus disclosed in Bursell et al. includes an image acquisition station 20 which is primarily comprised of an adjustable retinal camera 32 and operation controls which are connected via a telecommunications link 22 to a computer 18 network which is capable of receiving and

managing the images. The acquisition unit may include several such cameras in combination to provide for a more detailed or stereo image. The computer network is interfaced with a medical record database 10 and such is interconnected using a telecommunications link. The acquired images may be taken and viewed stereoscopically on a monitor attached to the computer for analysis by a trained ophthalmologist. A graphic interface may be included as computer software to permit enhancement of the video images, identification of the features of the retina and the like. The telecommunications system permits remote connections between the computer and acquisition unit.

As can be seen from the foregoing, Applicants' invention is unique in that it offers a remote examination console that can utilize a variety of medical examination tools to permit a full diagnosis of the patient's health as it relates to eye care. This is in substantial contrast to Hosoi et al. which diagnoses visual acuity data, and to Bursell et al. which exclusively discloses acquisition of a retinal picture. The multiple medical devices disclosed in Applicants' application include a retinal camera, a slit lamp, and a refractor, to name a few, and are designed to collect a variety of information including data and images for analysis and diagnosis. Additionally, the communications link disclosed in Applicants' invention permits two-way transmission of data and information between the remote location and the diagnostic center.

The Examiner has acknowledged that Hosoi et al. does not expressly disclose a diagnostic center for analyzing data and diagnosing conditions, yet asserts that it would be obvious to have a diagnostic center, in view of the teachings of Bursell et al. However, Applicants respectfully assert that such a finding of obviousness is improper since the Examiner has provided no sound reasons or motivation to combine the two references. The systems of Bursell et al. and Hosoi et al. are entirely different from one another. Bursell et al. discloses a system for transmitting a retinal *image* from an examination unit to a remote diagnostic station, while Hosoi et al. discloses a system for transmitting *data*, such as refractive measurements, from one examination unit to another examination unit. Thus, one of ordinary skill in the art would not find it obvious to apply the teachings of Bursell et al. to the disclosure of Hosoi et al., except in hindsight, using Applicants invention as a guide.

Furthermore, Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness. The Office Action fails to indicate *where in the prior art*, a suggestion or motivation is provided to modify the teachings of Hosoi et al. by those of Bursell et al. to obtain the presently claimed telemedicine system. Absent such an indication, Applicants submit that the rejections under 35 U.S.C.

§ 103 (a) cannot be maintained. The motivation or suggestion to support a rejection under 35 U.S.C. § 103 (a) must be clear and particular. *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). "Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). Applicants respectfully submit that the prior art fails to provide a clear and particular showing that one of ordinary skill in the art would have been motivated to combine the teachings of Hosoi et al. with that of Bursell et al. to obtain the claimed system. Absent such a clear and particular indication, the rejections under 35 U.S.C. § 103 (a) cannot be maintained.

Unlike those eye examination centers described in the prior art, Applicants' invention discloses a diagnostic center that is also designed to enable the practitioner to review and analyze the collected information in real time, conduct further tests as may be indicated as the examination proceeds, relay further commands to the remote location, or transmit a diagnosis to the patient located at the remote location. These features are not present in the prior art. Nowhere does Hosoi et al. or Bursell et al. disclose or even suggest the diagnostic center as described in the present invention. Applicants' system, including a diagnostic center, is capable of a complete and detailed analysis of the collected information and based on this information, further tests or communications are directed to the remote console. Such features are not present in the prior art and are not obvious based on the prior art references.

The Examiner has rejected Claims 1, 3, 4, 12, 17-20, 25 and 26 under § 103 (a) as being unpatentable over Hosoi et al. in view of Bursell et al. For the reasons detailed above, Hosoi et al. does not describe or suggest Applicants' invention, and neither reference contains any suggestion to combine the invention disclosed in Hosoi et al. with that disclosed in Bursell et al. to arrive at the claimed invention. Therefore, Applicants assert that it would not have been obvious to one of ordinary skill in the art to combine the two references to achieve the claimed invention and that the Examiner has not provided a *prima facie* case for obviousness. For the forgoing reasons, Applicants submit that the claimed invention is patentable over the prior art and that Claims 1, 3, 4, 12, 17-20, 25 and 26 should be allowed.

The Examiner has rejected Claim 2 under § 103 (a) based on Hosoi et al. In view of the above arguments directed towards Hosoi et al., Applicants assert that Claim 2 is patentable over Hosoi et al.

The Examiner rejected Claims 5 and 27 under § 103 (a) based on Hosoi et al. In view of the above arguments directed towards Hosoi et al., Applicants assert that Claims 5 and 27 are similarly patentable over Hosoi et al.

Claims 6 and 23 were also rejected under § 103 (a) based on Hosoi et al. Again, for the same reasons enumerated above, and directed towards the inapplicability of Hosoi et al., Applicants assert that Claims 6 and 23 are patentable over Hosoi et al.

Claims 7-9 were rejected under § 103 (a) as being unpatentable over Hosoi et al. in view of Kennedy et al. Nowhere does Hosoi et al. describe Applicants' invention, as detailed in the remarks above. Further, Applicant respectfully asserts that the Examiner has not provided any clear and particular motivation or suggestion to combine the Hosoi et al. and Kennedy et al. references, and has therefore failed to present a *prima facie* case of obviousness. Applicant asserts that there is no suggestion to combine Hosoi et al. with Kennedy et al., for example, to achieve the collecting of patient history via touch screen or voice activated input in conjunction with the multiple diagnostic apparatus or the use of two way communication to analyze and diagnose the patient as claimed by Applicants.

In view of the above, Applicants submit that it would not have been obvious to one of ordinary skill in the art to combine these two references to achieve the presently claimed invention. For the forgoing reasons, Applicants' believe that the present invention is patentable over Hosoi et al. in view of Kennedy et al. Under 35 U.S.C. § 103 (a) and that Claims 7-9 are allowable.

Claims 10, 15 and 24 were rejected under § 103 (a) as being unpatentable over Hosoi et al. in view of Mahmud et al. As further detailed above, Hosoi et al. does not describe or suggest Applicants' invention. The Examiner has not indicated *where* in the prior art there is a suggestion to combine the Hosoi et al. and Mahmud et al. references. Applicants assert that *neither* reference contains any suggestion to combine the disclosure in Hosoi et al. with that in Mahmud et al. to arrive at the claimed invention without the improper use of hindsight.

Therefore, Applicants submit that it would not have been obvious to one of ordinary skill in the art to combine Hosoi et al. and Mahmud et al. to achieve the claimed invention. For the forgoing reasons,

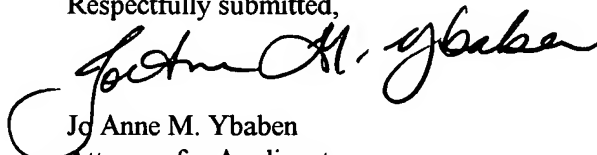
Application No. 10/087,697
Amendment Dated March 24, 2004
Reply to Office Action dated November 24, 2003

Applicants' submit that the present invention is patentable over Hosoi et al. in view of Mahmud et al. under 35 U.S.C. § 103 (a) and that Claims 10, 15 and 24 should be allowed.

For the foregoing reasons, Applicants submit that the method and system for examination and diagnosis of the eye as claimed herein is not fairly taught or suggested by any of the references of record, taken either alone or in combination. Therefore, allowance of the claims is believed to be in order. Therefore, early notice of allowance is respectfully solicited. If for any reason it is believed that any of the claims in the case might not be in condition for allowance, it is suggested that the examiner might telephone the undersigned attorney to discuss the merits of the case.

A one (1) month extension of time is requested pursuant to 37 C.F.R. 1.17(a)(1); check no. 4311 in the amount of \$55.00 is enclosed herewith. The Commissioner is authorized to deduct any other fees properly deemed to be due from Deposit Account No. 21-0890.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jo Anne M. Ybaben", is written over the typed name.

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